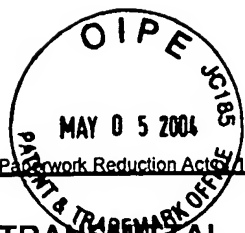


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<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	Application Number	10/768.408
	Filing Date	1/30/04
	First Named Inventor	Shanbhag et al.
	Art Unit	TBD
	Examiner Name	TBD
Total Number of Pages in This Submission	Attorney Docket Number	11471.00.0017

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): IDS Cover Sheet: Return postcard
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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Mark A. Dalla Valle Reg. No. 34,147
Signature	
Date	4/30/04

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PATENT

-1-

UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of ) Group Art Unit: N/A  
)  
SHANBHAG ET AL. )  
) INFORMATION DISCLOSURE  
Application No. 10/768,408 ) STATEMENT  
)  
Filed: January 30, 2004 )  
)  
For: DECISION FEEDBACK EQUALIZER ) Vedder, Price, Kaufman & Kammholz,  
WITH DYNAMIC FEEDBACK ) P.C.  
CONTROL ) 222 North LaSalle Street  
) Chicago, Illinois 60601  
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Sir:

Submitted herewith are patents, publications or other information may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR § 1.56.

This Information Disclosure Statement:

- (a) ☐ accompanies the new patent application submitted herewith. 37 CFR § 1.97(a).
- (b) ☐ is filed within three months after the filing date of the application or within three months after the date of entry of the national stage of a PCT application as set forth in 37 CFR § 1.491.
- (c) ☒ as far as is known to the undersigned, is filed before the mailing date of a first Office Action on the merits.
- (d) ☐ is filed after the first office action and more than three months after the application's filing date or PCT national stage date of entry filing but, as far as is known to the undersigned, prior to the mailing date of either a final rejection or a notice of allowance, whichever occurs first, and is accompanied by either the fee (\$180) set forth in 37 CFR § 1.17(p) or a certification as specified in 37 CFR § 1.97(e), as checked below.
- (e) ☐ is filed after the mailing date of either a final rejection or a notice of allowance, whichever occurred first, and is accompanied by the fee (\$180) set forth in 37 CFR § 1.17(i)(1) and a certification as specified in 37 CFR § 1.97(e), as checked below.  
This document is to be considered as a petition requesting consideration of the

information disclosure statement.

[If either of boxes (d) or (e) are checked above, the following "certification" under 37 CFR § 1.97(e) may need to be completed.] The undersigned certifies that:

- (f) ☐ Each item of information contained in the information disclosure statement was cited in a communication mailed from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this information disclosure statement.
- (g) ☐ No item of information contained in this information disclosure statement was cited in a communication mailed from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned after making reasonable inquiry, was known to any individual designated in 37 CFR § 1.56(c) more than three months prior to the filing of this information disclosure statement.

A list of the patent(s) or publication(s) is set forth on the attached Form PTO-1449 (Modified).

A copy of the items on PTO-1449 (Modified) is supplied herewith:

- (h) ☐ each      (i) ☐ none      (j) ☒ only those listed below:

JOHN G. PROAKIS, Digital Communications Fourth Edition, 2001, pp.598-659, McGraw-Hill Companies, Inc., New York, NY

JOHN G. PROAKIS, Digital Communications Fourth Edition, 2001, pp. 660-708, McGraw-Hill Companies, Inc., New York, NY

HEINRICH MEYR ET AL., Digital Communication Receivers, Synchronization, Channel Estimation, and Signal Processing, 1998, pp. 270-323, John Wiley & Sons, Inc., New York, NY

Those patent(s) or publication(s) which are marked with an asterisk (\*) in the attached form PTO-1449 (Modified) are not supplied because they were previously cited by or submitted to the Office in a prior application no., filed and relied upon in this application for an earlier filing date under 35 U.S.C. § 120.

A concise explanation of relevance of the items listed on form PTO-1449 (Modified) is:

- (k) ☒ not given
- (l) ☐ given for each listed item
- (m) ☐ given for only non-English language listed item(s) [Required]
- (n) ☐ is in the form of an English language copy of a Search Report from a foreign patent office, issued in a counterpart application, which refers to the relevant portions of the references [copy attached].

The Examiner is reminded that a "concise explanation of the relevance" of the submitted items "may be nothing more than identification of the particular figure or paragraph of the patent or publication which has some relation to the claimed invention," MPEP § 609.

While the information and references disclosed in this Information Disclosure Statement may be "material" pursuant to 37 CFR § 1.56, it is not intended to constitute an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.


In accordance with 37 CFR § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR § 1.56(a) exists. It is submitted that the Information Disclosure Statement is in compliance with 37 CFR § 1.98 and MPEP § 609 and the Examiner is respectfully requested to consider the listed references.

[ ] The Commissioner is hereby authorized to charge our Deposit Account No. 22-0259 for any fees required in connection with the filing of this Information Disclosure Statement. **A duplicate copy of this Notice is enclosed for this purpose.** In particular, in the event that an Office Action has crossed in the mail with this Information Disclosure Statement, the Commissioner is authorized to charge the above-named deposit account for any fees required pursuant to CFR §§ 1.17(p) or 1.17(i)(1).

Respectfully submitted,

VEDDER, PRICE, KAUFMAN & KAMMHOLZ, P.C.

Dated: April 30, 2004

By:   
Mark A. Dalla Valle  
Reg. No. 34,147

Attorney for Applicant(s)

Atty. Docket No: 11471.00.0017

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Substitute for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

*(Use as many sheets as necessary)*

Sheet	1	of	2
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**Complete if Known**

Application Number	10/768,408
Filing Date	January 30, 2004
First Named Inventor	Shanbhag et al.
Art Unit	TBD
Examiner Name	TBD
Attorney Docket Number	11471.00.0017

## U. S. PATENT DOCUMENTS

[illegible]

**FOREIGN PATENT DOCUMENTS**

[illegible]

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.<sup>1</sup> Applicant's unique citation designation number (optional).<sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.<sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).<sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.<sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible.<sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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**Complete if Known**

Application Number	10/768,408
Filing Date	January 30, 2004
First Named Inventor	Shanbhag et al.
Art Unit	TBD
Examiner Name	TBD
Attorney Docket Number	11471.00.0017

Sheet 2 of 2

**OTHER PRIOR ART—NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		JOHN G. PROAKIS, Digital Communications Fourth Edition, 2001, pp.598-659, McGraw-Hill Companies, Inc., New York, NY	
		JOHN G. PROAKIS, Digital Communications Fourth Edition, 2001, pp. 660-708, McGraw-Hill Companies, Inc., New York, NY	
		HEINRICH MEYR ET AL., Digital Communication Receivers, Synchronization, Channel Estimation, and Signal Processing, 1998, pp. 270-323, John Wiley & Sons, Inc., New York, NY	

Examiner  
SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

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